



US 20140161287A1

(19) **United States**

(12) **Patent Application Publication**  
**Liu et al.**

(10) **Pub. No.: US 2014/0161287 A1**

(43) **Pub. Date: Jun. 12, 2014**

(54) **ELECTRONIC DEVICE AND SOUND  
CAPTURING METHOD**

**Publication Classification**

(71) Applicants: **Lenovo (Beijing) Co., Ltd.**, Beijing  
(CN); **Beijing Lenovo Software Ltd.**,  
Beijing (CN)

(51) **Int. Cl.**  
**H04R 17/02** (2006.01)

(52) **U.S. Cl.**  
CPC ..... **H04R 17/02** (2013.01)  
USPC ..... **381/151**

(72) Inventors: **Junfeng Liu**, Beijing (CN); **Yunfeng  
Pan**, Beijing (CN); **Fei Wu**, Beijing  
(CN)

(57) **ABSTRACT**

(73) Assignees: **Lenovo (Beijing) Co., Ltd.**, Beijing  
(CN); **Beijing Lenovo Software Ltd.**,  
Beijing (CN)

An electronic device and a sound capturing method are described. The electronic device includes at least one first bone conducting unit, which is operable to detect vibration produced by an object in contact with the first bone conducting unit, and to generate an alternating current signal based on the detected vibration to capture a sound produced by the vibration; and a processing unit, which is operable to receive the alternating current signal and to perform an audio processing on the alternating current signal.

(21) Appl. No.: **14/102,596**

(22) Filed: **Dec. 11, 2013**

(30) **Foreign Application Priority Data**

Dec. 11, 2012 (CN) ..... 201210534037.3

